

River, and in the mountain districts of the Virginias, a great amount of damage was done to railroads and bridges.

The Grand River of Michigan was in flood during the last decade of the month, the first January flood for a great many years. At Grand Rapids, Mich., the maximum stage of the water was 11.5 feet, 0.5 foot above the danger line, and some of the lower factory basements along the river front were flooded.

The heavy rains in California from the 17th to the 19th, inclusive, caused a flood in the Sacramento River, and some unusually high stages were reported. At Red Bluff, Cal., the maximum stage was 25.3 feet, 2.3 feet above the danger line, while at Marysville, Cal., the crest stage was 21.6 feet, 1.6 feet above the previous high-water mark of February 25 and March 20, 1904. Some damage occurred from Colusa, Cal., northward, the most serious of which was the breaking of the Crocker levee in Colusa County.

Warnings were issued in advance of all the floods, and reports received indicate that they were of great value to all interested.

At the end of the month the Missouri River was frozen as

far south as the northern Nebraska line, and the ice had increased somewhat in thickness to the northward. The quantity, however, still continued to be less than that of the previous winter. The Mississippi River was frozen as far south as Leclaire, Iowa, whereas at the end of January, 1905, it was frozen as far as St. Louis where the ice was 11 inches in thickness. There was some increase in the ice in the rivers of northern New England, but there were still from eight to twenty inches less than at the corresponding period of 1905.

The rivers of the other districts were comparatively low, and nothing of more than ordinary interest was noted.

The highest and lowest water, mean stage, and monthly range at 287 river stations are given in Table VI. Hydrographs for typical points on seven principal rivers are shown on Chart I. The stations selected for charting are Keokuk, St. Louis, Memphis, Vicksburg, and New Orleans, on the Mississippi; Cincinnati and Cairo, on the Ohio; Nashville, on the Cumberland; Johnsonville, on the Tennessee; Kansas City, on the Missouri; Little Rock, on the Arkansas; and Shreveport, on the Red.—*H. C. Frankenfield, Professor of Meteorology.*

CLIMATOLOGICAL SUMMARY.

By Mr. JAMES BERRY, Chief of the Climatological Division.

The following summaries relating to the general weather and crop conditions during January are furnished by the directors of the respective sections of the Climatological Service of the Weather Bureau; they are based upon reports from cooperative observers and crop correspondents, of whom there are about 3300 and 14,000, respectively:

Alabama.—The mild weather was favorable for winter grain, though frequent rains kept the ground too wet for work. It was unseasonably warm from the 15th to 22d, though light freezes occurred during the first decade and the latter part of the third decade. Rainfall was heavy to locally excessive on the 21st and 22d. Wheat and fall oats advanced well. Little progress was made in seeding spring oats. Fruit trees continued in good condition. Preparation for staple crops was begun in southern counties during the last week.—*F. P. Chaffee.*

Arizona.—The month was unusually cold and cloudy from the 1st to the 25th, with a small amount of precipitation. Farm work was practically suspended, and winter feed was scarce in the northern counties, due to the accumulated depths of snow and the frozen condition of the soil. Wheat, oats, and barley grew slowly; in the southern counties these crops were still being sown. Almonds and strawberries were in bloom. The river beds were full of water. A large yield of citrus fruit continued. The ranges and cattle in the southern sections were in excellent condition.—*L. N. Jesunofsky.*

Arkansas.—The mean temperature was slightly above normal, but very cold weather prevailed during the first and last decades. The precipitation as a whole was slightly above normal, and excessive locally in the northwest. Snow occurred on several dates and was general on the 22d, with monthly amounts ranging from trace to 11.5 inches. The weather was generally unfavorable for farm work. Wheat and oats were in fairly good condition. Fruit was generally uninjured. Cotton picking was finished. Stock was generally in good condition, except locally in the southwest.—*H. F. Alcatorre.*

California.—The dry northerly winds and low temperature early in the month were followed by warm weather and generous, well distributed rainfall, with heavy snowfall in the mountains. The rain and melting snow caused high water and overflow of rivers in the central and northern sections, resulting in considerable damage to grain fields. On the whole, the rain was exceedingly beneficial, and by the close of the month grain and grass were in good condition.—*Alexander G. McAdee.*

Colorado.—Except for a brief period, the weather was mild and unusually favorable to live stock on the eastern slope, but in parts of the western slope and San Luis Park it was very cold. Range grass was covered with snow in some of the western and northwestern counties, but elsewhere grazing was not seriously interrupted. For the time of the year range cattle, horses, and sheep were generally in fine condition throughout the State.—*Fred. H. Brandenburg.*

Florida.—The temperature averaged practically normal. There were much cloudiness and some heavy rains, the greatest amounts of rainfall occurring over western counties and the least over the southern district. A fair acreage was sown to oats and some land was prepared for corn. Farmers were mostly engaged during the latter half of the month clearing fields and burning trash. Vegetables were backward, owing to frequent rains, but citrus trees were well advanced, many showing bloom.—*A. J. Mitchell.*

Georgia.—Land was damaged somewhat and farming operations were

retarded by excessive precipitation. Winter grains showed good stands, and satisfactory progress was made by these crops in most localities. Fruit suffered no injury, the trees being in excellent condition generally. Scarcity of labor was reported from some localities. Roads were bad and very little hauling was done.—*J. B. Marbury.*

Hawaii.—Temperatures were generally above normal during the first half of the month, but were abnormally low during the latter half; the nights were very cold during the second and third decades. Although rather heavy showers occurred in portions of windward Hawaii, eastern Maui, and northern Kauai during the first few days, and heavy leeward rains were general during the latter part of the second decade, the month as a whole was dry for this season of the year. High winds occurred at intervals all the month, and exceptionally stormy weather prevailed during the second decade, causing considerable damage to young cane, plantation buildings and flumes, trees, and shrubs, especially in northern Hawaii and Maui. The growth of young cane was retarded by low temperatures, but conditions during the first and third decades were very favorable for ripening of 1906 cane and for harvesting, which proceeded rapidly in all sections. Ripening of winter pineapples was retarded during the first and third weeks by cloudy days and cold nights. Preparation of rice lands was general throughout the month; by the close of the month the setting out of seedling plants had begun in all sections. Coffee picking was virtually finished during the month, the yield on the whole meeting the expectations of growers. Leeward pastures were dry during the early part of the month, but were greatly helped by the rains of the second decade.—*Alex. McC. Ashley.*

Idaho.—Snow covered most of the winter range during the month, necessitating continued feeding of stock. In some localities feed became very scarce, but most stock came through the month in good condition. Winter grain was well protected by snow. Fruit trees and shrubs were reported as wintering well.—*Edward L. Wells.*

Illinois.—The month was the mildest January since 1880. Precipitation was above normal, being heavy in parts of the southern district. Wheat maintained a good winter condition. The plant was exposed most of the season, but the weather had not been sufficiently rigorous to cause damage. Corn was keeping well; a considerable portion of the crop had been marketed. Meadows and pastures had wintered well. Apples and potatoes were not keeping well.—*Wm. G. Burns.*

Indiana.—The prevailing warmth, with frequent, but generally light, rains from the 3d to 23d, inclusive, caused a rather rank growth of wheat, rye, and grasses. There was a slight improvement in the general condition of southern bottom lands, but in most cases the moisture continued excessive. Early fruit buds formed prematurely and were in danger from later freezes. Some plowing for oats was done during the last two weeks.—*W. T. Blythe.*

Iowa.—The month was abnormally warm, with less than the usual amount of stormy weather. The average precipitation was slightly above normal and mainly in the form of snow; the ground was generally well covered during the prevalence of lowest temperature, affording protection to winter wheat and rye. Conditions were favorable for stock feeding and the usual winter work on farms.—*John R. Sage.*

Kansas.—The past January was the warmest since 1886, except that of 1900, when the average temperature was the same. The precipitation was slightly below normal, but the ground remained moist. Wheat continued in good condition. Plowing for spring crops continued, and was nearly completed in Chautauqua County by the close of the month.

Fruit buds were not injured. The weather was quite favorable to stock, which wintered well.—*T. B. Jennings.*

Kentucky.—The weather was unusually mild. There was no damaging cold, though there was slight damage from alternate freezing and thawing. Practically no snow covered the ground. Wheat, rye, and grass were in fine condition. Fruit trees were uninjured, but warm weather caused buds to swell. Stock was in excellent condition and feed was plentiful. Farm work was well advanced and some plowing for hemp and corn was accomplished.—*F. J. Walz.*

Louisiana.—Rain and occasional low temperature interfered with outdoor work and, except in scattered localities, very little progress was made in farming operations. Preparations for cotton and corn crops were very backward. Rye and oats were doing well. The remainder of the sugar crop was harvested during the month. Seed cane was in good condition. Fall plant cane was doing well. Truck gardens suffered from low temperatures.—*I. M. Cline.*

Maryland and Delaware.—With but one exception January was the warmest winter month in the past fifteen years. Only one cold wave was experienced and that was not severe nor general. Precipitation was about normal and well timed. Rose bushes and other early plants burst into full leaf, and various shrubs into bloom. Wheat, clovers, and grasses became green and made decided growth. Fruit buds swelled considerably, but were not considered sufficiently advanced to be in jeopardy.—*C. F. von Herrmann.*

Michigan.—January was an unusually mild month. The precipitation was about normal, but there was considerably less snow than usually occurs, especially in the central and southern counties. The ground was without material snow protection in the principal agricultural counties the greater part of the month, but owing to the absence of any extremely cold weather winter wheat and rye did not suffer. Both cereals made fairly good winter growth and at the close of the month looked healthy and promising.—*C. F. Schneider.*

Minnesota.—Mean temperatures were everywhere considerably above normal. The minimum temperatures, which were all below zero, occurred on the 8th and 22nd, and the maximum temperatures on the 26th to 29th. Considerable snow covered the State all the month, the greatest depth being in eastern and northern portions. Ice was cut all the month, but the thickness was less than usual. No work in the soil was possible. Building operations of all kinds continued without interruption.—*T. S. Outram.*

Mississippi.—Cold waves overspread the State on the 9th and 23d, but the month as a whole was milder than usual, with unseasonably high temperature from the 15th to the 21st, inclusive. Heavy rains occurred on the 2d, 3d, 21st and 22d, but no precipitation was recorded subsequent to the 23d. The soil was generally too wet for plowing until the last week, when conditions became favorable and farm work was quite generally commenced. Preparations for truck gardening were making splendid progress at the close of the month.—*W. S. Belden.*

Missouri.—The weather of the month was pleasant and was of much the same general character as that which prevailed during December. There were very few stormy or disagreeable days, the greater part of the month being bright and sunny. Wheat was fairly well protected by snow covering and the crop was reported to be in good condition. Fruit buds were advanced and swollen, but remained uninjured at the close of the month.—*George Reeder.*

Montana.—The month was unusually mild and free from severe storms. Ranges were open in the eastern portion, but mostly covered with snow in the western, where nearly all stock was fed. Cattle, sheep, and horses were generally in satisfactory condition. Wheat was well protected by snow in the western counties, but fields were mostly bare in the eastern portion.—*R. F. Young.*

Nebraska.—The warm, pleasant month was exceptionally favorable for stock and for all work in the open air. The ground was without snow covering practically the whole month. There was little wind and no severely cold weather to injure winter wheat, which continued in good condition.—*G. A. Loveland.*

Nevada.—The mean temperature for the State was slightly above normal, and the average precipitation was 0.71 inch above normal. Remarkably heavy storms occurred in the northern and western sections from the 11th to the 19th, but mild weather during the last decade melted the snow rapidly, and no great loss of stock resulted. In the southern section cattle and sheep were in fine condition and were wintering on the range.—*H. F. Alps.*

New England.—The weather of the month was unusually mild. The snowfall was moderate and there was an absence of severe storms and cold waves. The mean temperature for the month and the maximum temperatures from the 21st to 24th were among the highest recorded in any January. At the close of the month there was but little frost in the ground, and no snow on the ground except in the northern parts of the section. Stock continued to winter well, and the mild weather was favorable for outdoor work and wood cutting.—*J. W. Smith.*

New Jersey.—The month was noted for its remarkably mild temperature, there being only one cold period, from the 9th to the 11th, when the temperature fell to zero or below at some places in the northern section. The snowfall was abnormally light, and was insufficient to afford protection to the winter grain. Late sown wheat improved and

suffered no serious injury from the frequent freezing and thawing. Fruit buds were swelling at the close of the month.—*Edward W. McGann.*

New Mexico.—The precipitation of the month was light, but soil moisture was abundant, as most of the heavy snow of December was absorbed. Temperature conditions were generally favorable and stock of all kinds was in good condition; losses were few and little feeding was required. Considerable plowing was done during the month, and general preparation was made for early spring work in central and southern counties.—*Charles E. Linney.*

New York.—The month was generally mild and pleasant. The temperature averaged considerably above normal and was very high on the 21st and 22d. While the precipitation was light, it was generally sufficient. Wheat and rye were fairly well protected by a covering of snow during the coldest part of the month. The warm weather of the 21st and 22d caused grasses and some fields of winter grain to take on a greenish tinge and sap started slightly in the trees.—*W. C. Devereaux.*

North Carolina.—The temperature and rainfall for the month were above the normal. In general the weather was favorable for growing crops, but there were some complaints in the central counties of too much rain. Winter wheat, rye, and oats were reported in good condition. Strawberries were doing well, and gardens exceptionally well. Considerable damage to fruit trees was sustained in the north-central counties, owing to a heavy sleet storm.—*A. H. Thieszen.*

North Dakota.—The month was unusually mild, with an abundance of sunshine during the greater portion and an absence of severe storms. These conditions were unusually favorable for stock. In the western part of the State, where the snow was light, stock was able to feed on the ranges throughout the greater portion of the month, and very little feeding of hay was necessary.—*B. H. Bronson.*

Ohio.—The weather during the month was very mild. The precipitation was mostly in the form of rain, but the ground was well protected by snow during the coldest period, especially in the south, where the lowest temperatures were recorded. Outdoor work progressed favorably. Wheat and rye were generally in good condition and made good growth. Fruit buds appeared safely dormant, notwithstanding the abnormal temperature conditions. Tobacco was mostly stripped.—*J. Warren Smith.*

Oklahoma.—The temperature averaged above normal. The severe cold wave of the 22d and 23d caused no material injury to stock or fruit trees. The precipitation was generally deficient, but the soil continued in excellent condition for plowing, which progressed under generally favorable conditions. Wheat made a moderate growth, and showed a good, healthy stand, except in a few localities. Stock was healthy and wintering well.—*J. P. Slaughter.*

Oregon.—In the high sections fall wheat was covered by snow, and in the low sections no severe cold spells occurred; therefore the wheat crop everywhere was in good condition at the close of the month. Neither grass nor grain made any growth of consequence and pasturage was unusually short, which necessitated the feeding of a large amount of hay to range and dairy stock. No plowing or seeding was done.—*Edward A. Beals.*

Pennsylvania.—The past January was the warmest in eighteen years. The unusually mild weather was favorable for outdoor work. The precipitation was unevenly distributed, but ample. Very little frost was in the ground, which was without snow protection. Winter grain was well set and thrifty, although there was some complaint from northern counties of alternate thawing and freezing. Stock and pastures were in excellent condition.—*C. J. Doherty.*

Porto Rico.—The weather was generally very dry and favorable for the maturing of the cane crop, but somewhat detrimental to young canes, tobacco, and small crops. Most of the sugar mills were in operation by the close of the month. The yield of cane was generally good, but the grade of juice was somewhat below the normal for the season. October sown tobacco was harvested; the yield was reported good to excellent. Coffee trees were in excellent condition and full of buds.—*E. C. Thompson.*

South Carolina.—The daily temperatures were generally favorable for maintaining winter grain crops in good condition and for the growth of truck crops in the coast districts, where fruit trees began to bud and peach trees to bloom. Wheat and oats were not winter killed. The precipitation was excessive and rendered the soil unfit for plowing, except on plains in the eastern portions, where some plowing was done.—*J. W. Bauer.*

South Dakota.—The month was warmer and more agreeable than usual, with rather less than the normal amount of precipitation. The weather was very favorable for stock, which was in very satisfactory condition. Range pasturage was good, and, except in some extreme northern counties, the snowfall was generally too light to prevent the steady grazing of stock on the ranges. Absence of continuous snow covering was considered unfavorable to winter grains in some southern localities, but there was no special damage apparent.—*S. W. Glenn.*

Tennessee.—The mild weather was favorable to the germination of late sown wheat, which generally showed good stands at the close of the month, but it was rather warm for a healthy growth of early wheat. There was but slight damage from freezing and thawing. Oats were in good condition and pastures were better than usual at this season. Precipitation occurred frequently, but the monthly amounts averaged about

SUMMARY OF TEMPERATURE AND PRECIPITATION BY SECTIONS, JANUARY, 1906.

In the following table are given, for the various sections of the Climatological Service of the Weather Bureau, the average temperature and rainfall, the stations reporting the highest and lowest temperatures with dates of occurrence, the stations reporting greatest and least monthly precipitation, and other data, as indicated by the several headings.

The mean temperatures for each section, the highest and

lowest temperatures, the average precipitation, and the greatest and least monthly amounts are found by using all trustworthy records available.

The mean departures from normal temperature and precipitation are based only on records from stations that have ten or more years of observation. Of course the number of such records is smaller than the total number of stations.

Section.	Temperature—in degrees Fahrenheit.								Precipitation—in inches and hundredths.					
	Section average.	Departure from the normal.	Monthly extremes.						Section average.	Departure from the normal.	Greatest monthly.		Least monthly.	
			Station.	Highest.	Date.	Station.	Lowest.	Date.			Station.	Amount.	Station.	Amount.
Alabama.....	47.2	+ 2.8	3 stations.....	80	18, 20	Valley Head.....	15	9	4.66	-0.32	Lucy.....	7.72	Daphne.....	2.66
Arizona.....	42.9	- 1.1	Parker.....	84	27	Flagstaff (a).....	-20	2	0.73	-0.48	Huachuca Reservoir.	4.36	5 stations.....	0.00
Arkansas.....	43.1	+ 2.9	Centerpoint.....	82	18	Eureka Springs.....	- 2	23	5.19	+1.07	Warren.....	9.60	White Cliffs.....	1.16
California.....	47.5	+ 1.9	Jonesboro.....	82	21	Bodie.....	-13	8	7.86	+2.83	Helen Mine.....	33.75	4 stations.....	0.00
Colorado.....	26.4	+ 3.4	Hanford.....	95	6	Gunnison.....	-45	22	0.69	-0.08	Silverton.....	3.00	Las Animas.....	0.00
Florida.....	58.3	+ 0.2	Lamar.....	78	31	Molino.....	-21	24	4.60	+1.56	Bonifay.....	11.63	Fort Myers.....	2.02
Georgia.....	47.5	+ 3.2	Orange City.....	88	22	Diamond.....	16	9	6.06	+2.22	Bowersville.....	11.14	Poulan.....	2.45
Hawaii.....	68.3	+ 0.8	St. George.....	83	22	Ramsey.....	16	10	4.80	+1.31	Nahiku, Maui.....	17.51	Kukaiou, Hawaii.....	0.23
Idaho.....	25.4	+ 0.2	Kihei, Maui.....	87	7	Humuula, Hawaii.....	29	31	4.06	+0.46	Landore.....	6.51	Lewiston.....	0.58
Illinois.....	32.7	+ 6.5	Oakley.....	55	18	Chesterfield.....	-30	8	2.71	+1.11	Equality.....	7.60	La Grange.....	1.61
Indiana.....	35.4	+ 7.2	Equality.....	75	20	Lanark.....	- 6	9	3.34	-0.21	Princeton.....	7.10	Franklin.....	1.35
Iowa.....	24.6	+ 4.8	3 stations.....	74	20, 21	Mauzy, Richmond.....	-11	9	3.09	+0.57	Ridgeway.....	4.71	Inwood.....	0.28
Kansas.....	35.2	+ 5.4	Keokuk.....	69	20	Charles City.....	-19	8	1.52	-0.04	Walnut.....	2.83	Hugoton.....	T.
Kentucky.....	39.7	+ 5.5	Englewood.....	77	19	Columbus.....	- 6	23	0.71	-0.31	Blandville.....	7.84	Irvington.....	1.43
Louisiana.....	51.0	- 0.8	Loretto.....	80	21	Farmers.....	- 9	9	3.48	-0.02	Kennedy.....	1.30	Minden.....	0.80
Maryland and Delaware.....	38.8	+ 7.4	Scott.....	80	20	Robeline.....	14	24	3.30	-1.44	Clinton.....	6.19	Porto Bello, Md.....	1.08
Michigan.....	28.8	+ 8.8	Minden.....	85	20	Oakland, Md.....	- 6	10	2.88	-0.16	McDonogh, Md.....	4.74	Grape.....	0.89
Minnesota.....	17.0	+ 7.0	Millsboro, Del.....	76	23	Humboldt.....	-21	24	2.82	+0.65	Old Mission.....	6.32	Angus.....	0.07
Mississippi.....	47.4	+ 1.2	Coldwater.....	70	21	Detroit City.....	-39	22, 23	1.15	+0.44	St. Charles.....	1.97	Pontotoc.....	2.26
Missouri.....	35.6	+ 3.4	Hovland.....	58	27	Booneville.....	14	9	3.97	-1.15	Magnolia.....	7.30	Conception.....	0.60
Montana.....	24.7	+ 5.2	5 stations.....	80	18-20	3 stations.....	- 8	9, 23	3.64	+1.31	Pinehill.....	7.88	Chinook.....	0.04
Nebraska.....	30.0	+ 6.7	4 stations.....	76	20	Grayling.....	-33	21	0.78	-0.04	Saltese.....	5.46	Ewing.....	0.00
Nevada.....	28.4	+ 0.7	Billings.....	65	31	Lynch.....	-24	8	0.46	-0.02	Kennedy.....	1.30	McAfee Ranch.....	T.
New England*.....	30.1	+ 7.5	Fort Logan, Steele.....	65	25	Potts.....	-15	2, 8	2.32	+0.71	Lewers Ranch.....	14.33	Burlington, Vt.....	1.00
New Jersey.....	36.5	+ 6.5	3 stations.....	66	18	Van Buren, Me.....	-25	19	2.83	-0.91	Durham, N. H.....	6.50	Cape May City.....	2.08
New Mexico.....	34.2	- 0.4	Wabaska.....	63	3 dates	Layton.....	- 5	9	2.85	-0.87	Flemington.....	3.86	Palma.....	0.00
New York.....	30.3	+ 8.5	Torrington, Conn.....	69	22	Tres Piedras.....	-19	22	0.42	-0.19	Chama.....	2.10	Hemlock Lake.....	0.39
North Carolina.....	43.9	+ 4.8	3 stations.....	74	22	North Lake.....	-27	8	1.86	-1.00	Cold Spring Harbor.....	4.49	Weldon.....	2.77
North Dakota.....	12.2	+ 5.4	Rowell.....	79	17	Back Springs.....	3	10	5.86	+1.60	Pink Beds.....	16.87	Flasher.....	0.09
Ohio.....	35.7	+ 7.7	4 stations.....	72	21, 22	Willow City.....	-38	22	0.69	+0.19	Willow City.....	1.60	Bowling Green.....	0.72
Oklahoma and Indian Territories.....	40.5	+ 3.6	Tarboro.....	81	22	Pulse.....	-14	9	1.98	-0.74	Jacksonburg.....	3.89	Chattanooga, Okla.....	0.04
Oregon.....	37.7	+ 1.9	Palermo.....	60	31	Okmulgee, Ind. T.....	-15	23	1.28	-0.05	Stilwell, Ind. T.....	3.45	Umatilla.....	0.60
Pennsylvania.....	35.0	+ 8.0	Ironton.....	79	21	Riverside.....	- 8	1	5.15	-0.37	Glenora.....	19.78	Lawrenceville.....	0.76
Porto Rico.....	73.5	+ 0.6	Shawnee, Ind. T.....	85	21	Derry Station.....	- 4	9	2.53	-0.74	Somerset.....	5.28	Coloso.....	0.05
South Carolina.....	47.0	+ 2.5	Fairview.....	74	30	Wellsboro.....	- 4	9	2.53	-0.74	Aibonito.....	5.50	Bennettsville.....	3.52
South Dakota.....	21.5	+ 6.9	Freeport.....	85	22	Adjuntas.....	46	6	1.67	+2.53	Liberty.....	11.69	White Horse.....	T.
Tennessee.....	42.1	+ 4.4	Adjuntas.....	93	4	Seivern.....	12	10	5.35	-0.08	Elk Point.....	1.35	Dover.....	2.08
Texas.....	45.3	+ 0.6	Hermosa.....	66	28	Gaud River School.....	-31	23	0.40	-0.01	Silver Lake.....	7.93	2 stations.....	0.00
Utah.....	25.3	- 1.1	Sparta.....	77	22	Jonesboro.....	- 2	9	4.53	-1.13	Nacogdoches.....	4.85	Frisco.....	0.10
Virginia.....	40.8	+ 5.7	Tilden.....	89	20	Dalhousie.....	- 2	22	1.15	+0.28	Burkes Garden.....	6.43	Shenandoah.....	1.72
Washington.....	55.2	+ 3.3	Plateau, St. George.....	70	27	Strawberry Valley.....	-39	9	1.60	+0.69	Clearwater.....	18.57	Kennewick.....	0.23
West Virginia.....	58.2	+ 7.2	Arvonia.....	77	22	3 stations.....	- 8	20	3.73	-0.56	Princeton.....	8.70	Wheeling.....	1.36
Wisconsin.....	21.7	+ 6.4	North Head.....	65	31	Twisp.....	- 8	10	4.05	+0.29	Osceola.....	4.50	Berlin.....	1.30
Wyoming.....	21.6	+ 1.7	Wheeling.....	80	21	Philippi.....	- 5	10	3.79	+1.36	Upper Geyser Basin, Y. N. P.....	4.88	4 stations.....	T.
			Stevens Point.....	64	27	Grantsburg, Osceola.....	-28	8	2.47	+1.17				
			Pine Bluff.....	68	26	Border.....	-31	8, 9	2.23					
						Daniel.....	-31	22						

* Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.

† 51 stations, with an average elevation of 752 feet.

‡ 145 stations.

the same as the normal. Fruit buds became considerably swollen during the period of unusually high temperature from the 14th to 22d.—*H. C. Bate*.

Texas.—Precipitation occurred mostly during the first few days of each decade and was decidedly deficient for the State. The mean temperature was about normal. Farming operations generally progressed nicely and small grain did well in most sections, but garden truck was much damaged by freezing temperatures. Some cotton remained unpicked and was probably a total loss. Range grass and stock suffered from want of water in western and northwestern counties, but there was comparatively little loss.—*B. Bunnemeyer*.

Utah.—Settled weather prevailed, except during a short period at the middle of the month, when general storms gave considerable rain and snow over the State, thus securely protecting winter grain and producing an improved outlook for spring growth. Winter fed stock was doing well, but animals on the range were beginning to suffer in localities, owing to the deep snow. Farm work was confined principally to teaming, orchard work, and stock feeding.—*R. J. Hyatt*.

Virginia.—The weather of the month was generally mild, and, on the whole, favorable for crop progress. All winter crops did well, especially wheat, oats, rye, barley, and grasses, while owing to the open weather considerable plowing was done. Seed beds for tobacco were prepared in some localities. Orchards received some damage, generally from ice caused by freezing rains. No ice was harvested during the month.—*Edward A. Evans*.

Washington.—The mild weather of the month was favorable for winter wheat, barley, and fruit trees, there having been no severe cold spells to cause injury. Wheat was somewhat backward, however, as regards growth, and stands were thin. It was generally in good condition, although a report from Klickitat County stated that fall-sown grain looked poor. There was no snow covering for the wheat at the end of the month.—*G. N. Salisbury*.

West Virginia.—The exceptionally warm weather during the month was very favorable for farm work. Winter wheat and rye were doing well, although they suffered from lack of snow protection during the freezing intervals of the month. Stock was in good condition, and there was sufficient feed on hand. Plowing for spring planting had commenced in some sections.—*H. C. Howe*.

Wisconsin.—The temperature averaged considerably above the normal; the excess was well distributed throughout the month, although unseasonably high temperatures were recorded at a few stations during the last decade. The precipitation was above the normal and well distributed. Winter crops were doing nicely and the snow covering was ample. Stock was in good condition.—*J. W. Schaeffer*.

Wyoming.—Over the eastern half of the State, the month was unusually favorable for stock interests, the range having been free from snow for the greater part of the month. Over the western half, snowfalls were much heavier, covering much of the range and necessitating more feeding. At the close of the month stock was in good condition and losses had been small.—*W. S. Palmer*.